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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/537,470	06/03/2005	Hitoshi Yano	Q88131	3255

23373 7590 03/29/2007  
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WASHINGTON, DC 20037

EXAMINER
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NGUYEN, HIEU P

ART UNIT	PAPER NUMBER
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2817

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/29/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

<b>Office Action Summary</b>	Application No. 10/537,470	Applicant(s) YANO ET AL.	
	Examiner Hieu P. Nguyen	Art Unit 2817	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 23 January 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) 2-8, 10, 12-18 and 20 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 9, 11 and 19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Specification***

Applicant is required to update the status (pending, allowed, etc.) of all parent priority applications in the first line of the specification. The status of all citations of US filed applications in the specification should also be updated where appropriate.

The specification has not been checked to the extent necessary to determine the presence to all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

### ***Drawings***

Figures 8(b) and 11-13 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1 and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by **Iwai et al.** (U.S. 6,114,911).

Regarding claim 1, Figures 1-2 of Iwai discloses an amplifying circuit comprising: an amplifier amplifying a signal received through an input terminal (1), and outputting the signal through an output terminal (2); and a control circuit (3 and 7) inherently turning at least one of an input impedance and an output impedance of said amplifier into a high impedance (note: high impedance is occurring when the switches are on), **meeting claim 1.**

Regarding claim 2, Iwai discloses the amplifying circuit as set forth in claim 1, further comprising a field effect transistor (see Fig. 2, TR5) electrically connected in series between said amplifier and a power source (Fig. 2, Vd1), said field effect transistor interrupting a current from flowing to said amplifying circuit from said power source when said amplifying circuit is off, **meeting claim 9.**

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Claim 11 is rejected under 35 U.S.C. 102(b) as being anticipated by **Yoshizawa et al.** (U.S. 5,862,461).

Regarding claim 11, Yoshizawa discloses in Fig. 5 a gain-variable amplifying circuit comprising at least two amplifying circuits (e.g. 64-65) electrically connected in parallel to each other and having gains different from one another as mentioned in col. 9, line 49, said amplifying circuits each comprised of an amplifier amplifying a signal received through an input terminal, and outputting the signal through an output terminal; and a control circuit (57) inherently turning at least one of an input impedance and an output impedance of said amplifier into a high impedance, wherein a gain is controlled by turning at least one of said input and output impedances of an amplifying circuit(s) other than a selected amplifying circuit, into a high impedance, **meeting claim 11**.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over **Yoshizawa** in view of **Iwai**.

Regarding claim 19, Yoshizawa broadly shows in Fig. 5 a generic amplifier, thus failing to supporting the claimed limitations of “a field effect transistor electrically connected in series

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between said amplifier and a power source, said field effect transistor interrupting a current from flowing to said amplifying circuit from said power source when said amplifying circuit is off'.

However, Iwai discloses in Fig. 1-2 an analogous (please see claim 1 and claim 9 for more detail) having the claimed "field effect transistor" (see Fig. 2 of Iwai, TR5) for interrupting a current from flowing to said amplifying circuit from said power source when said amplifying circuit is off.

It would have been *prima facie* obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Iwai Yoshizawa into the circuit of Yoshizawa by including the claimed transistor. The ordinary artisan would have been motivated to modify the circuit of Yoshizawa in the manner set forth for at least the purpose of improving efficiency (see e.g. col. 7, lines 49-51 of Iwai), **meeting claim 19**.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hieu Nguyen whose telephone number is 571-272-8577. The examiner can normally be reached on M-F 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Pascal can be reached on 571-272-1769. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

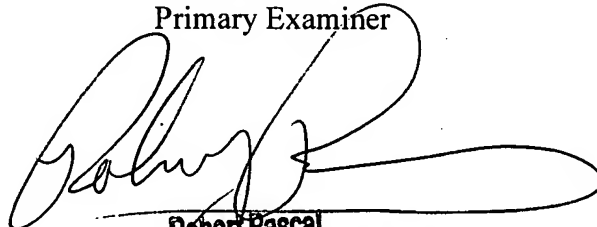
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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Hieu Nguyen  
AU: 2817

hn

Robert Pascal  
Primary Examiner

A large, stylized handwritten signature in black ink, likely belonging to Robert Pascal, is written over the printed name and title.

Robert Pascal  
Supervisory Patent Examiner  
Technology Center 2800